

EUROPEAN ADHESIVES AND SEALANTS — MARKET REPORT — 2023 - 2028

A QUANTITATIVE DEMAND
ANALYSIS AND TREND FORECAST



Introduction

This report is the eighth edition of the market study programme entitled 'The European Adhesives and Sealants Market', prepared by Smithers on behalf of FEICA, the Association of the European Adhesive and Sealant Industry.

The first FEICA European market report was issued in 2005 and covered the period 2004-2007. In 2008, the second edition was released covering the period 2007-2010. Due to the economic downturn in 2009, a concise update was issued in January 2010 to supplement the second report. Due to COVID-19, a seventh edition that included the impact of the pandemic on the EU market was commissioned in 2021, covering the period 2021-2026. This eighth edition covers the period 2023-2028. With much disruption and uncertainty in the marketplace today, it is more important than ever to get an accurate picture of the market.

The aim of this programme is to provide market statistics from an independent source which are updated at regular intervals. The analysis is based on extensive desk and primary research. It consists of market knowledge obtained by direct interviews from the adhesives and sealants industry (formulators, raw material producers and equipment suppliers), analysed by Smithers experts, and expertise checked by industry experts. The geographic scope of the study encompasses Europe, including Western Europe, Central and Eastern Europe (CEE) and Turkey. The European region is split into 5 regional markets, which are analysed by market segment and product category.

The study follows the harmonised FEICA-ASC-CATIA Adhesives and Sealants Classification Manual. Furthermore, the 300+ page report is structured in such a way as to facilitate international comparisons between Europe, NAFTA and the Asia-Pacific region. The markets of the latter two regions are analysed in separate companion reports offered by the Adhesive and Sealant Council (ASC).

The market size is defined for the year 2022 and a demand forecast for the period 2023-2028 is also provided. The statistical data are reported in tonnes and euro currency.

The facts set out in this publication are obtained from sources which we believe to be reliable. However, we accept no legal liability of any kind for the publication contents, for any information contained therein or for conclusions drawn by any party.

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Report contents

Executive summary

- Overview
- Adhesive trends
- Sealant Trends
- Adhesive & sealant technology trends
 - Recyclability and waste management
 - Indoor air quality (IAQ)
 - Bio-based adhesives & sealants
 - Unmet needs
- Market segment trends
- Regulatory trends
 - EU Green Deal
 - PPWR
- Regional trends

1. Introduction and methodology

- Background
- Report objective
- Report scope
- Methodology
- Definitions
- Abbreviations

2. European overview – key market drivers and trends

- Introduction
- European adhesives and sealants topline trend
- Materials supply, availability and pricing
 - European A&S supply chain dynamics
- Global regulatory landscape impacting adhesives & sealants
 - EU Green Deal
 - Other regulations
 - CE marking, CPR/VOC, EU-OSHA, CEN/ISO
- European adhesives and sealants key market drivers
 - Post-pandemic impacts
 - Survey results - Factors affecting trends and developments in European A&S industry
 - Technology innovations
 - Changes in legislation and regulations
 - Environmental consideration and sustainability issues
 - Economic trends

- Consumer and end-user requirements
- Geographic shifts in industrial production
- Consolidation in A&S and associated industries
- Importation of goods from different regions
- Adhesives and sealants market drivers in Europe in the next five years

3. European adhesive and sealant market by product category

Adhesives

- Adhesives based on natural polymers
- Polymer dispersions and emulsions
- Hot-melt adhesives
- Solvent-based adhesives
- Reactive adhesives (polymerising)
- Adhesives based on water-soluble polymers
- Other adhesives processes

Sealants

- Silicones
- Acrylics
- Polyurethanes
- Polysulfides
- Butyls, bitumen and pitch, oil-based
- Silane-modified polymers
- Other sealants

Regulatory changes that could impact the adhesive/sealant type

Key factors for adhesive or sealant selection

Unmet needs from A&S technology

Technology development priorities

4. European adhesive and sealant market by market segment

Adhesives

- Paper, board & related products
- Transportation
- Footwear & leather
- Consumer/DIY
- Building, construction, civil engineering, craftsmen
- Woodworking & joinery
- Assembly/other

Sealants

- Construction
- Transportation
- Consumer/DIY
- Assembly operations/other

Market segment trends

- Building & construction
- Transportation

Consumer/DIY
Assembly operations
Paper, board & related products
Woodworking & joinery
Footwear & leather

5. Western Europe country analysis

Austria
Benelux countries
France
Germany
Great Britain (UK)
Italy
Nordic countries
Spain and Portugal
Switzerland
Other Western Europe

6. Central & Eastern Europe (CEE) country analysis

Czech and Slovak Republics
Hungary
Poland
Russia
Turkey
Other CEE

Sample Pages

Executive summary

Overview

The European adhesives and sealants (AAS) market in 2022 was 4.8 million tonnes with a value of €19.9 billion. Adhesives accounted for 82.5% share of the total volume in 2022 and 74.7% share of the value. Estimated volume demand in 2023 for adhesives & sealants will be lower at 4.6 million tonnes, although market value will remain roughly equal at €19.9 billion.

The combined demand for adhesives and sealants in Europe is forecast to see a small increase in volume between 2021 and 2028 at 1.3% CAGR. Volume demand in 2028 is forecast at 5.3 million tonnes, and a growth in value over the reporting period of 2.0% CAGR will result in a market of €21.4 billion. Although sealants have a smaller share of the European AAS market, their demand is forecast to grow at a slightly faster rate in volume than adhesives between 2023 and 2028.

FIGURE 1.1 Europe adhesives & sealants market in 2022 ('000 tonnes and € million)



Source: Statista

Demand for adhesives and sealants started to recover in 2021 from the depressed market of 2020. However, growth started to slow in 2022 as regional and global economies suffered from the effects of continuing high material costs, supply chain disruptions, and escalating energy costs resulting from the Russian invasion of Ukraine. These factors pushed up inflation levels, slowing consumer and business spending and putting many investment decisions on hold. Sales of adhesives and sealants in 2022 were also affected by delisting of high inventory levels built up in 2021 as a hedge against longer delivery schedules, occasional shortages, and ever-increasing prices.

Inflation rates have been slow to fall in 2023 in many European countries and the European Central Bank and central banks in non-EU countries continued to hike interest rates to try and bring them under control. The higher bank rates have been passed on to consumers in the form of higher mortgage and credit interest rates, reducing disposable income levels for many households. High bank interest and mortgage rates are expected to be in place into 2024 and continue to dampen economic growth.

Adhesive trends

Adhesives based on polymer dispersions & emulsions are the largest product group used in Europe with over 45% share of volume demand in 2022. Reactive (polymerising) adhesives account for 19.5% of volume demand in the same year and hot-melt adhesives had a share of around 15.6%. Solvent-based adhesive demand is forecast to decline up to 2028 as end users switch to more environment-friendly types, albeit at a slow rate since their high-performance properties will continue to be required for specialist applications over the next few years.

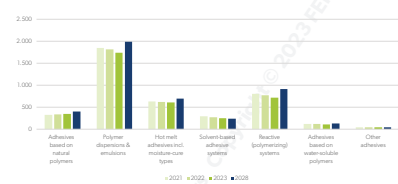
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Go to the Content Overview 7

Executive summary

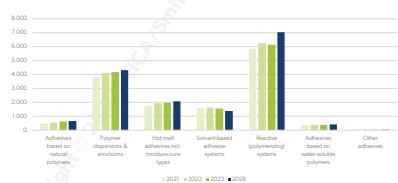
Reactive adhesives have been least affected by the economic downturn in 2022 and 2023 and are forecast to exhibit the fastest growth rate in the five years up to 2028. This growth comes from an increased demand for high-performance applications, such as the growing use of adhesives to replace mechanical fasteners in assembly operations. Adhesives based on natural polymers are also forecast to see strong growth from 2021 to 2028 due to an increased demand for sustainable materials.

FIGURE 2.2 Europe adhesives demand by product category, 2021–2028 ('000 tonnes)



Source: Statista

FIGURE 2.3 Europe adhesives demand by product category, 2021–2028 (€ million)



Source: Statista

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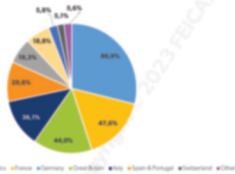
Go to the Content Overview 8



European overview – key market drivers and trends

Germany is the largest market in A&S demand in Western Europe with a demand of over 430,000 tonnes in 2022. France and Great Britain were the next two largest markets with demand for around 476,000 tonnes and 460,000 tonnes respectively.

FIGURE 2.3 Market share of adhesives and sealants 2022 by volume in Western European markets (%)



Other: Denmark, Ireland, Italy, Russia, Sweden

Average per capita consumption for the CEE region is significantly lower than in Western Europe, average with the highest per capita consumptions in Poland, Czech and Slovak Republics, Hungary and in Turkey as is shown in Table 2.2.

TABLE 2.2 CEE demographic and macroeconomic data 2021-2028

Country	Population	GDP	Per Capita GDP	Adhesives & Sealants Demand	Per Capita A&S Demand
	Millions	€ Billions	€ 000s	000T	Tg
Central & Eastern Europe	16.3	251.9	20.7	0.9	60.0
Czechia	10.7	152.2	15.6	0.6	5.8
Poland	37.9	422.8	10.3	3.0	8.2
Romania	19.0	2,140.1	16.7	0.9	3.7
Slovakia	5.7	27.9	5.9	0.2	3.8
Other*	102.0	1,093.3	9.9	3.2	3.8
Sum/Average	401.8	5,198.2	12.9	1,005.8	4.9

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Go to the Content Overview 27

European adhesive and sealant market by product category

TABLE 2.3 CEE adhesives demand by product group, 2021-2028 ('000 tonnes & € million)

Sub-Group	2021	2022	2023	2028	CAGR (%) 2021-23	CAGR (%) 2021-28
Totals						
Adhesive based on natural polymer	12.8	10.7	10.4	13.0	3.4	3.3
Water based adhesive	76.7	80.8	81.4	88.1	2.7	3.8
Hot melt adhesive/ non-water based	17.6	17.9	17.4	20.0	3.9	3.2
Synthetic based adhesive system	138.9	158.8	159.3	153.9	-1.8	0.8
Non-water based adhesive system	126.1	134.4	137.9	130.0	2.9	3.3
Adhesive based on water soluble polymer	49.2	49.7	49.4	50.4	1.0	2.0
Other adhesives	1.6	1.6	1.7	1.8	0.8	2.8
Sum	1,847	1,878	1,823	1,736	2.1	4.0
€ million						
Adhesive based on natural polymer	55.0	37.8	36.3	29.3	4.4	1.8
Water based adhesive	1,492.3	1,522.8	1,540.3	1,488.4	3.7	3.8
Hot melt adhesive/ non-water based	207.7	202.1	200.8	209.4	4.4	3.3
Synthetic based adhesive system	1,886.2	1,787.7	1,802.0	1,688.9	-2.2	-1.4
Non-water based adhesive system	2,186.1	2,161.3	2,185.8	2,081.3	3.4	3.3
Adhesive based on water soluble polymer	138.8	140.2	138.4	141.9	2.2	3.2
Other adhesives	10.2	10.2	10.4	10.7	1.1	3.0
Sum	5,400	5,500	5,508	5,054	2.8	2.4

Source: toolbox

Adhesives based on natural polymers

Adhesives based on natural polymers accounted for value of 338,000 tonnes with a value of €307 million in Europe in 2022, although the product group had only a small share of overall demand at 0.3% of the volume and only 2.7% of the value in 2022, demand is forecast to show a slight second fastest growth after reactive adhesives from 2023 to 2028 at 3.7% CAGR in volume and 1.4% CAGR in value. This will result in demand in 2028 of 455,700 tonnes and €446 million.

This strong growth is being mainly driven by the environmental credentials of these adhesives, being based on sustainable materials such as starch, bioresin, lignin, and natural rubber latex. Starch and bioresin are derived from plant sources such as corn, potatoes, rice, and sugarcane. Casein is the chief protein in milk and is a by-product of the dairy processing industry. Nearly 90% of natural polymer adhesives are used in paper and board applications, especially for aqueous-based and conjugated end packaging. There are also used in adhesives in some construction and textile processing adhesives. Natural rubber latex is used in pressure sensitive adhesives for various paper products and labels as well as special adhesives for labeling and bubble manufacture.

Natural polymer adhesives can be characterized as bio-based adhesives, although most of these products are currently based on blends of starch or casein with synthetic polymers. As such, they may find new opportunities over the next five years in packaging applications, particularly for foodstuffs. The packaging industry is moving to a greater use of bio-based adhesives for applications such as PET containers, flexible packaging, corrugated boards, carton side seams, and flexible laminates. Corrugated boxes are among the fastest growing packaging materials in both the food and beverage industry. The packaging growth in e-commerce is also driving their growth in packaging for consumer goods.

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Go to the Content Overview 31



FEICA

Rue Belliard 40 box 10
1040 Brussels
Belgium

T +32 (0)2 896 96 00

E info@feica.eu

W www.feica.eu



Smithers

Cleeve Road, Leatherhead,
Surrey KT22 7RU
UK

T +44 (0) 1372 802080

F +44 (0) 1372 802079

E information@smithers.com

W www.smithers.com